

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remain(s) under examination in the application is presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or fewer characters; and 2. added matter is shown by underlining.

1-25. (Cancelled).

26. (Currently Amended) A method of enabling two aircraft components to be joined together, said method including the steps of

providing a first aircraft component and a second aircraft component, the first aircraft component having a surface to be joined to a corresponding surface of a second aircraft component, said first and second components being so shaped that if joined there would be a gap space defined between said surfaces of said first and second components,

providing a resin infusion system comprising a source of resin, said resin infusion system comprising a moulding tool, the moulding tool being distinct from the second aircraft component and having a surface for arrangement against said first aircraft component, said surface of the moulding tool being shaped to correspond to said surface of said second aircraft component such that, when said surface of said moulding tool is arranged against said first aircraft component, a gap is present between the surface of the moulding tool and the first aircraft component,

arranging said moulding tool surface against said first aircraft component such that said gap is formed between said moulding tool surface and said first aircraft component,

effecting flow of said resin from said source of resin into said gap between said moulding tool surface and said first aircraft component by means of suction, thereby substantially filling said gap with resin, the flow of the resin out of the gap is restricted by means of a barrier and at least a part of the barrier is formed by a surface of said resin infusion system, said surface of said resin infusion system being provided by a said moulding tool;

curing said resin to form a shim on said first aircraft component, and

removing from the moulding tool the said first aircraft component bearing said shim.

27. (Cancelled).

28. (Previously Presented) A method according to claim 26, wherein said barrier is, during the filling of said gap with resin, removably fixed in position relative to said first aircraft component.

29. (Previously Presented) A method according to claim 28, wherein said barrier is fixed to said first aircraft component by means of a pressure difference.

30. (Previously Presented) A method according to claim 29, wherein a single vacuum pump is used both to cause said pressure difference and to provide the suction that draws said resin into said gap.

31-32. (Cancelled).

33. (Previously Presented) A method according to claim 26, wherein a surface of said first aircraft component is prepared so that adherence of said resin to said surface of said first aircraft component is improved, a surface of said barrier is prepared so that the adherence of the resin to said surface of said barrier is reduced to facilitate separation of said barrier from said resin once cured.

34. (Previously Presented) A method according to claim 26, wherein the method includes a step of joining said second aircraft component to said first aircraft component, after said resin has cured.

35. (Previously Presented) A method according to claim 26, wherein a filter is provided to hinder flow of said resin out of said gap.

36. (Previously Presented) A method according to claim 26, wherein said first aircraft component includes at least one aperture arranged so that the suction is provided via said at least one aperture.

37. (Previously Presented) A method according to claim 36, wherein said resin enters said aperture, and the method includes a step of remachining said aperture after said resin has cured.

38. (Previously Presented) A method according to claim 26, wherein the curing of said resin is effected by cold curing.

39. (Previously Presented) A method according to claim 26, wherein said first aircraft component is formed of a composite material.

40-44. (Cancelled).

45. (Currently Amended) A method of joining two aircraft components together, said method including the steps of

providing a first aircraft component and a second aircraft component, the first and second aircraft component being formed of a composite material, said first aircraft component having a surface to be joined to a corresponding surface of a said second aircraft component formed of a composite material, said first and second components being so shaped that if joined there would be a gap space defined between said surfaces of said first and second components,

providing a resin infusion system comprising a source of resin, the resin infusion system comprising a moulding tool, the moulding tool being distinct from the second aircraft component and having a surface for arrangement against said first aircraft component, said surface of the moulding tool being shaped to correspond to said surface of said second aircraft component such that, when said surface of said moulding tool is arranged against said first aircraft component, a gap is present between the surface of the moulding tool and the first aircraft component,

arranging said moulding tool surface against said first aircraft component such that said gap is formed between said moulding tool surface and said first aircraft component,

placing said first aircraft component against a surface of said resin infusion system;

effecting flow of said resin from said source of resin into said gap by means of suction, thereby substantially filling said gap with resin, the flow of the resin out of the gap being restricted by means of a barrier, at least a part of said barrier being formed by a surface of said resin infusion system, said moulding tool, and said barrier moulding tool and said first aircraft

component being, during the filling of said gap, removably fixed in position relative to each other by means of a pressure difference,

curing said resin whilst between said first aircraft component and said-barrier moulding tool so as to form a shim on said first aircraft component,

separating said first aircraft component and said-barrier moulding tool after said resin has cured, and

joining said second aircraft component to said first aircraft component and said shim.

46- 48. (Cancelled).

Please add new Claims 49-52.

49. (New) A method according to claim 26, wherein the moulding tool is mounted on a supporting base.

50. (New) A method according to claim 26, wherein the moulding tool is provided with a locating element that engages with a corresponding element on the first aircraft component.

51. (New) A method according to claim 26, wherein the moulding tool is made from polyurethane or epoxy.

52. (New) A method according to claim 26, wherein the resin is heated prior to it being drawn into the gap between the moulding tool and the first aircraft component.